

**Testimony of the International Brotherhood of Electrical Workers
General Law Committee
Thursday February 25, 2010**

Senator Colapietro, Representative Shapiro, members of the General Law Committee, my name is Paul Costello, I am here to testify on behalf of the IBEW, the International Brotherhood of Electrical Workers and National Electrical Contractors Association Joint Apprenticeship Training Committee to express our support of House Bill 5225, An Act Concerning Solar Work.

The JATC has been training apprentices for over seventy years to become electricians. A registered apprentice electrician receives 8,000 hours of on-the-job training (OJT) over a minimum of four years in addition to a minimum of 720 hours of related instructions. Apprentices in our JATC receive up to 10,000 hours of OJT and 1,200 hours of classroom training before they are eligible to take their state electrical license exam. The training includes AC and DC theory, technical math, rigging, conduit bending, wiring, bonding and grounding, blueprint reading, electronics, construction safety, CPR and first aid, and how to comply with and interpret the National Electrical Code. In addition to all this they are trained in the design and installation of photovoltaics (PV). Their OJT includes residential, commercial, and industrial applications. These are all components required for the installation of solar photovoltaics and wind generation.

Licensed electrical contractors and electricians have been installing PV for many years; this is not a new technology. PV installations have been under the scope of work for licensed E1 and E2 electricians since it was introduced. Information from the Connecticut Clean Energy Fund (CCEF) Eligible Installer List identifies 44 installers eligible for the rebate program and solar lease program. Of the 44 solar installers 17 of them are E1 unlimited electrical contractors while only 4 are PV1 license holders. The remaining installers do not make any reference to license status. This appears to be in line with overall numbers in state. There are over 12,800 E1 and E2 licenses in the state. There are another 1,762 apprentices registered to 1,800 programs. PV license holders and apprentices total .26% of the electrical industry in Connecticut. There are only 29 PV1 and PV2 license holders while 60% of them do not reside in the State of Connecticut. There are only 4 apprentices registered to 3 sponsors in the state. Those apprentices are only required to complete a two year 4,000 hour apprenticeship. This does not appear to be a sufficient amount of time to gain the experience required to perform electrical work on residential, commercial and industrial facilities.

HB 5225 defines "solar electricity work" and limits the work a limited licensed PV holder may perform. Presently there is much focus on residential PV installations because of the rebates available from the CCEF. We must not lose sight that many larger PV installations are on commercial and industrial establishments. These large arrays comprise of hundreds of modules capable of producing tens of thousands watts of power operating at high voltages. These arrays need to be connected and integrated with existing pieces of electrical equipment previously installed by licensed electricians. This work needs to be completed by licensed electricians.

The exemption to the licensing requirement should be deleted. In order to maintain a safe installation and protect persons and property all materials needs to be handled and installed by workers that have been properly trained. There are no exemptions to any of the other electrical limited or unlimited licenses. This is extremely important when handling PV equipment. PV modules when exposed to light produce a source of voltage and cannot be turned off. This poses a safety hazard to the unlicensed worker.

I urge you to support HB 5225 An Act Concerning Solar Work and leave the work to the unlimited E1 and E2 license holders that have been properly trained to install electrical equipment. There is no reason to create a new separate workforce when there is already one available that is facing unemployment.

Respectfully,

Paul Costello
Director of Apprenticeship and Training